



New York City Department of Environmental Protection
Town+Gown Request for Proposals
under the Consortium Contract
Croton Filtration Plant: Analysis of Biologically Activated Carbon Study (the Project)

I. General Items

A. Invitation to Submit Proposals in Response. The New York City Department of Environmental Protection (the “Requestor” or “DEP”) invites the Consultants under the Town+Gown Master Academic Consortium Contract (the “Consortium Contract”), to submit Proposals in Response to the Croton Filtration Plant: Analysis of Biologically Activated Carbon Request for Proposals (the Town+Gown RFP), pursuant to the terms and provisions of the Consortium Contract and this Town+Gown RFP. All defined terms used herein but not defined have the meanings assigned to them in the Consortium Contract.

B. Due Date for Receipt of Proposals in Response. Consultants shall submit their Proposals in Response ONLY via email, no later than 5:00 P.M., November 21, 2024, to Jeanne Schreiber, RFP Administrator, at jschreiber@dep.nyc.gov. Please note that there is a 5 MB file size limit. If a Consultant chooses not to submit a Proposal in Response, such Consultant shall submit a No Bid Response form (which is attached to this document as Attachment A for the purpose of convenience and is downloadable from the Town+Gown website at (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>) no later than 5:00 P.M., November 21, 2024, to Jeanne Schreiber, RFP Administrator, at jschreiber@dep.nyc.gov.

C. Inquiries and Requests from Consultants for Clarification or Explanation. If a Consultant wishes to make an inquiry or request a clarification or explanation with respect to this Town+Gown RFP, such Consultant must make such inquiry or request in writing sent via email ONLY to Jeanne Schreiber, RFP Administrator, at jschreiber@dep.nyc.gov, no later than 5:00 P.M., October 21, 2024. In the event the Requestor determines that it is necessary to respond to such inquiry or request in writing, such response will be furnished as an addendum to this Town+Gown RFP (an Addendum) and will be sent to all Consultants as described below. If the Requestor deems it necessary, it may arrange a meeting or conference call with all interested parties prior to the submission date to address questions or concerns.

D. Addenda to Town+Gown RFP. If the Requestor determines that it is necessary to respond to an inquiry or request for clarification or explanation from a single or several Consultants in writing, such writing will be in the form of an Addendum to this Town+Gown RFP, which will become part of the requirements for such Town+Gown RFP, and sent by Town+Gown/DDC to all the Consultants to which the Town+Gown RFP was issued. In addition, it will be necessary for such Consultants to acknowledge receipt of an Addendum to a Town+Gown RFP by attaching an original signed copy of the Addendum to its Proposal in Response.

E. The Name and Contact Information of the Requestor's Procurement Process Contact. All Proposals in Response, Inquiries or Requests for Clarification or Explanation, and receipts of any Addenda, shall be sent via email ONLY to:

Jeanne Schreiber

RFP Administrator, DEP

jschreiber@dep.nyc.gov

II. The Research Project

A. Background

The New York City Croton Water Supply System is capable of delivering up to 290 million gallons of water per day through the Croton Filtration Plant, which is located in Bronx, NY. The Croton Filtration Plant (CFP) is a conventional water treatment plant that uses a Dissolved Air Flotation (DAF) clarification process "stacked" over granular activated carbon (GAC)/sand dual media gravity filters. The DAF clarified water is conveyed to the gravity filters underneath where remaining particulates and contaminants (i.e., Dissolved Organic Carbon (DOC) and emerging contaminants) are removed through the GAC media.

More specifically, CFP accomplishes treatment through the following processes in sequence: coagulation using alum-a cationic polymer used as a coagulant aid and sulfuric acid used for pH adjustment; DAF for clarification; filtration through 3.5 ft. Granular Activated Carbon (GAC) and 1ft. of sand; UV disinfection; and finally, chemical treatment. The chemical treatment consists of sodium hypochlorite for disinfection as well as to maintain residual fluoride to combat tooth decay, orthophosphate for corrosion control, and sodium hydroxide for pH adjustment and corrosion control.

In 2015, CFP was brought online with dual media sand/anthracite as the filter media. Intermediate sodium hypochlorite was added upstream of the filters to maintain an oxide coating for dissolved manganese removal. Since the anthracite was replaced with GAC media, intermediate sodium hypochlorite addition has been discontinued, and an alternative method of dissolved manganese treatment was installed. A chlorine dioxide facility was recently constructed approximately 30 miles upstream from the CFP at the Croton Lake Gatehouse to provide pretreatment oxidation for dissolved manganese removal.

In 2018, customer complaints for taste and odor increased when the CFP was online. BWS determined that the likely cause was Geosmin and 2-Methylisoborneol (MIB). To combat the odor and taste complaints, the anthracite was removed and replaced with GAC in 2020. Treatment requirements were met and the aesthetic issues of color, and taste and odor were all reduced as soon as the GAC media was installed. However, GAC is exhausted quickly, and testing is needed to determine if taste and odor removal through GAC filters can be improved.

A range of water quality parameters for Croton water are provided below:

Water Quality Parameters	Average	Range
Temperature (°C)	11	2 - 22
pH	7.8	7.4 – 8.6
Conductivity (µs/cm)	411	331 - 459
TOC	3.1	1.6 – 4.0
Turbidity (NTU)	0.92	0.21 – 4.9
Alkalinity (mg/L as CaCO ₃)	72	61 - 82
UV ₂₅₄ (cm ⁻¹)	0.08	0.04 – 0.12

B. General Research Project Description:

The purpose of this Project is to study whether the GAC at the CFP is able to convert to Biological Activated Carbon (BAC) in order to improve plant functionality and extend the lifespan of existing GAC media. Biofiltration relies on water quality that supports growth of microorganisms; therefore, it will be necessary to determine if the Croton Water Supply System (Croton Supply) will sustain BAC.

The Consultant shall be required to perform a desktop evaluation to determine if the Croton GAC media can be converted to BAC, then conduct pilot studies to evaluate impacts to filtration performance and production. The Consultant will need to evaluate filter runtimes and the biologic activity within the Croton Supply, and the subsequent effect the GAC going biologic. If the BAC develops, the Consultant shall determine if BAC is beneficial through improved treatment performance, while filter throughput will determine if the change is sustainable.

The effectiveness of BAC filtration in emerging contaminant removal will be studied in four columns of 6” diameter pipe that have been installed and plumbed to the DAF basin effluent within the CFP (Clarified Zone). Water from the Clarified Zone within process train is fed into the columns at a rate of 1 GPM, to simulate about 6 MGD flow through the full-sized filter and a static height of water over the media that is equal to existing filters. The columns are fitted with equipment to monitor for flow and headloss, and are designed so that additional sampling ports could be added, as needed. Additional samples can be collected from the CFP Clarified Zone prior to filtration using an existing sampling port.

The study is planned for 12 months during a time that encompasses the CFP being operational for a minimum of 9 months as detailed below under C. Research Project Objectives. The project will begin with an extensive literature survey. DEP will provide full-scale plant information required to evaluate BAC filtration for emerging contaminant removal in Task I. Task II constitutes the main experimental phase of the project, for which the work plan will be developed in collaboration with DEP's Bureau of Water Supply (BWS) and the Project staff.

C. Research Project Objectives

Task 1: Desktop Evaluation (2 months)

This task consists of a desktop evaluation that includes a literature review and model potential biomass development.

Desktop Evaluation: The Consultant shall perform a desktop evaluation, including a literature review to determine potential for the existing CFP GAC filter media to operate as a BAC filter, and to evaluate biofiltration to meet treatment objectives for the Croton water supply by modeling potential biomass development and biodegradation of the following contaminants that includes, but is not limited to:

- DOC
- Dissolved Mn
- Taste & Odor causing compounds
- Emerging contaminants

The Consultant's desktop evaluation shall utilize modeling tools to study the Croton water supply. The Consultant's desktop evaluation shall include modeling the initial acclimation process and a simulation of biodegradable organic matter removal (i.e., BIOFILM Model (Hozalski et al.)) and a Conversion Assessment Tool for potential contaminant removal ranges based on the CFP operating characteristics (i.e., Upadhyaya et al.) to evaluate optimization strategies (including nutrient augmentation). The Consultant may use Biodegradable Dissolved Organic Carbon (BDOC) of the natural water to determine the ideal nitrogen and phosphorus required to promote a biomass. BWS will make available data for Nitrate, Total Nitrogen, Total Dissolved Nitrogen, and Ammonia (as N), which are measured monthly for the source water supply. In addition, phosphoric acid is added to the finished water and may be adjusted via the backwash water.

Deliverable: Desktop Evaluation Workshop and Report – the literature review and results of the desktop evaluation will be submitted to determine if full-scale pilot testing (Task 2) is appropriate. The report should define next steps. The three-hour workshop shall be held at a DEP location. The Consultant shall present the findings of the report and facilitate discussion. A revision of the report based on the workshop and comment tracking log will be resubmitted.

Task 2: Bench Testing + Pilot Testing

Task 2 consists of a bench test and a pilot test to determine whether the GAC in the CFP has the potential to go biological and, if so, observe its ability to treat water through the CFP.

- Task 2a Bench Testing is intended to demonstrate the potential for biologic activity on GAC media.
- Task 2b is a large-scale pilot test using existing columns at the CFP. The findings of Task 2b will be incorporated into the mid-year and final reports and provide data and recommendations for future plant operations. Task 2b will commence when Task 2a is approved by the Project Manager.

Task 2a: Bench Testing (3 months)

Task 2a serves to verify the ability of the GAC to go biological via a water quality analysis to quantify the organic carbon that can be assimilated into biomass and, if so, a coupon study to measure Biofilm growth. Jar testing shall be done by the Consultant to generate clarified water for AOC/BDOC testing. If Biofilm formation rate is measured, then schematics and a protocol for the flow-through coupon test rig shall be provided.

- Water Quality Analysis: the Consultant shall quantify the organic carbon that can be assimilated into biomass or biodegraded using Assimilable Organic Carbon (AOC) and Biodegradable Dissolved Organic Carbon (BDOC) assays on the Croton water supply. These measurements are required for source water and clarified water at the average alum dose used at the CFP; additionally, at least one reduced coagulant dose should be evaluated.
- Biofilm Formation Rate (if appropriate): the Consultant shall conduct an in-line coupon study to measure biofilm growth based on Adenosine Triphosphate analysis over a 4-week time period. The amount of biomass that can accumulate on the coupon is directly related to water quality and the impacts of temperature, quantity and quality of organic carbon, and pH. The biofilm formation rate should be reported as ATP divided by the coupon surface area.

Deliverable: Jar Testing Protocol.

Task 2b: Pilot Testing (18 months)

The Consultant shall develop an experimental plan that includes media type and operating scenarios, determined in collaboration with DEP. Four 6-inch diameter pilot columns at the CFP shall be used. One column will be used as a baseline to simulate the conditions in the full-scale plant. The operating conditions for the remaining three columns will be based on the results of Tasks 1 and 2a and pilot testing will be of sufficient duration to incorporate operations during seasonal changes in water quality.

Upon approval of the Consultant’s experimental plan, the following Water Quality Parameters shall be monitored during pilot testing are as follows, but not limited to:

Parameter	Daily	Weekly	Monthly
Dissolved Oxygen	x		
Turbidity*	x		
pH* (before DAF)	x		
Alkalinity*		x	
Dissolved Mn		x	
Total Organic Carbon		3x/week	
Dissolved Organic Carbon		3x/week	
ATP			2x/week
Geosmin		as needed	
2-Methylisoborneol		as needed	
PFAS Compounds			X
Biofilm Growth Potential	To be determined by the consultant		
* DEP to provide this data			

The Consultant shall measure the following Performance Monitoring Requirements:

- Clean bed headloss changes
- Headloss over filter depth
- Change in Unit Filter Run Volume
- Filter run length based on 9.5 ft headloss

Supplemental chemicals may be required if the source water is nutrient limited. Potential augmentation strategies identified in Task 1 will be piloted by the Consultant to determine impacts on supporting a biofilm and may include addition of orthophosphate.

Deliverables: As deliverables for Task 2b, the Consultant shall include an experimental plan, data analysis and preparation of a midyear report summarizing the findings of Task 2b activities six months into pilot testing, and a final report submitted at the conclusion of pilot testing that summarizes the pilot test and makes recommendations for full-scale implementation of BAC at CFP.

Criteria for work:

- Primary testing to be performed using full scale columns installed at CFP and feed from Clarified Zone.
- All laboratory testing will be performed by a NYSDOH ELAP certified laboratory or DEP-approved contract laboratory, as appropriate.

References

Hozalski R.M., E.J. Bouwer, and S. Goel. 1999. Removal of natural organic matter (NOM) from drinking water supplies by ozone-biofiltration. *Wat. Sci. & Technol.* 40, 157-163.

Upadhyaya G, Brown J, Evans A, et al. 2017. Biofilter Conversion Guidance Manual. Project 4496. Water Research Foundation. Denver.

III. Format and Contents of the Proposal in Response

The Proposal in Response must be in a form that conforms to Appendix B-2 to the Consortium Contract, which template form is attached to this document as Attachment B for the purpose of convenience. That template form is also downloadable from the Town+Gown: NYC website at (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>). The Consultants shall not make changes to the Proposal in Response template form.

IV. Evaluation Criteria and Evaluation Procedures

A. Criteria. The Proposals in Response will be evaluated on the basis of criteria set forth below:

<i>Criteria</i>	<i>Weight</i>	<i>Explanation</i>
<i>Experience</i>	40%	Background and experience with respect to the disciplines and issues covered in the Research Project.
<i>Organizational Capability</i>	20%	Organizational capability and the clear definition of roles and duties of the members of the Academic Team, as well as clear lines of communication among them, particularly with regard to interdisciplinary and practitioner input.
<i>Approach and Methodology</i>	30%	Approach to the Research Project and methodologies proposed.
<i>Cost</i>	10%	Cost proposals will be evaluated competitively. The Requestor has allocated \$1,000,000 for this research project.

B. Other Considerations.

1. *Insurance.* If awarded the Task Order resulting from this T+G RFP, the Consultant and all of its subconsultants must not commence performing any services under the resulting Task Order until all insurance required by this T+G RFP, and the resulting Task Order, is in effect and provided satisfactorily to the Requestor. The Consultant must ensure uninterrupted and continuous insurance coverage in the manner, form, and limits required by this T+G RFP, and the resulting Task Order, throughout the entire duration of the Task Order.

The Consultant must provide the insurance as indicated below:

Article 7 – Insurance	
Types of Insurance	Minimum Limits and Special Conditions
<ul style="list-style-type: none"> ■ Workers’ Compensation ■ Disability Benefits Insurance ■ Employers’ Liability 	Statutory amounts
<input type="checkbox"/> Commercial General Liability	\$_____ per occurrence \$_____ personal & advertising injury \$_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Commercial Auto Liability	\$_____ per accident combined single limit

	If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90
<input type="checkbox"/> Professional Liability/Errors & Omissions	\$ <u>1,000,000.00</u> per claim

2. *Subcontracting.* The Consortium Contract, under which this T+G RFP has been issued, permits Consultants to join with one or more other Consultants to prepare a Proposal in Response (see Section 3.3 (b)) as well as to utilize Subcontractors (as defined in the Consortium Contract) as part of a Proposal in Response (see Sections 3.3(b) and 3.3(e)(8)). Consultants should refer to the Consortium Contract if they wish to consider joint proposals with researchers at other Academic Consortium institutions or include Subcontractors as part of their Proposal in Response. Individual researchers developing Proposals in Response should contact the Gown Advisory Council representative for the respective Academic Consortium institution to obtain a copy of the Consortium Contract, the form of which is also downloadable from the Town+Gown website (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>). Please note that Consultants wishing to subcontract with a Subcontractor as part of its Proposal in Response must disclose its intention to use the services of a Subcontractor in its Proposal in Response as provided in Section 3.3 (e) (8) of the Consortium Contract and Appendix C to the Consortium Contract.

C. Basis of Award. The Requestor, will award the Research Project to the responsive and responsible Consultant whose Proposal in Response is determined to be the most advantageous to and in the best interest of the City, taking into consideration all the criteria and considerations which are set forth above in this Town+Gown RFP. Award of the resulting Task Order is subject to successful negotiation of terms of the Task Order as provided in the Consortium Contract and the PPB Rules.

Form of No Bid Response

NO BID RESPONSE

SUBMIT BY RFP RESPONSE DUE DATE

RFP NAME	REQUESTOR	PROPOSAL IN RESPONSE DUE DATE

To: [Requestor Agency]

Secretary, Gown Advisory Council

Town+Gown/DDC, as Consortium Contract Administrator

This is to certify that _____, a Consultant academic institution under the city-wide Town+Gown Master Academic Consortium Contract, will not be submitting a Proposal in Response to the above referenced solicitation document prepared by the listed Requestor.

REASON(S) FOR NO SUBMISSION:

UNAVAILABILITY OF REQUIRED RESOURCES

PRIOR COMMITMENTS

INADEQUATE ANTICIPATED FUNDING LEVEL

PROJECT DURATION

POTENTIAL CONFLICT OF INTEREST

DUPLICATION OF ONGOING EFFORT

OTHER (PLEASE EXPLAIN)

AUTHORIZED REPRESENTATIVE:

NAME: _____

TITLE: _____

SIGNATURE: _____

DATE: __/__/20__

Form of Proposal in Response Template with Instructions Memo

[Consultant logo/letterhead here]

**[Name of Consultant's] Proposal in Response to
[Name of Town+Gown RFP]
under the Consortium Contract [insert MMA1 number]**

*** IMPORTANT NOTE! *** *CONSULTANTS MUST NOT CHANGE THE FORM OF THE PROPOSAL IN RESPONSE. The Proposal in Response accepted by the Requestor will form the basis of the Task Order, and it is important that this template form be unchanged. if you have questions, please contact the Requestor contact on the Town+Gown RFP or your institution's Gown Advisory Council representative.*

*** IMPORTANT NOTE! *** *This Proposal in Response form is related to a public procurement and not a grant program, and the terms of the Proposal in Response that the Requestor selects for an award become the terms of the resulting Task Order, subject to further negotiation only as permitted by the Consortium Contract and the City's Procurement Policy Board rules.*

Prepared by [Consultant Name]

[Date]

*Article 1. Agreement. This Proposal in Response has been prepared and submitted pursuant to the provisions of the Town+Gown Master Academic Consortium Contract, by and between [*** IMPORTANT NOTE! *** Insert your institution's name] (the Consultant), and the New York City Department of Design and Construction ([*** IMPORTANT NOTE! *** Insert MMA1 number for Consortium Contract for your institution from chart on preceding memo]) (the Consortium Contract). All capitalized terms used, but not defined, herein shall have the meanings ascribed to them in Article 1 of the Consortium Contract.*

If this Proposal in Response is accepted by the Requestor, the awarded Research Project will be governed by a Task Order, negotiated and executed, pursuant to Section 3.4 of the Consortium Contract and the PPB rules, by the Consultant and the Requestor, which Task Order will define the contractual relationship between the Consultant (to become the Academic Partner) and the Requestor (to become the Practitioner Partner) for the duration of the Research Project. The provision of services under the Task Order will be further governed by the terms and conditions of the Consortium Contract, including but not limited to those in the Town+Gown RFP, complying with the provisions of Section 3.2 of the Consortium Contract, and those in the Consortium Contract as required and provided therein.

If this Proposal in Response is accepted by the Requestor, the Consultant agrees to accomplish the Project for which a Task Order will be executed and registered, on time and within budget. The nature of academic research requires some flexibility in the timing of performance, with unforeseeable obstacles and delays. Section 4.03(a) of the PPB Rules is analogous to the National Science Foundation's practice with respect to delays in academic research and is available as a method of providing extensions of time on Task Orders for performance due to the typical delays in academic research. The Academic Partner shall not perform services under the Consortium Contract until a Task Order has been executed and registered with the Comptroller.

Article 2. Proposal in Response to Town+Gown RFP.

*** IMPORTANT NOTE! ***

Subject to the requirements of the Consortium Contract and the Town+Gown RFP issued by the Requestor, this Proposal in Response shall be organized in a manner so as to provide the types of information as described below. Please review Section 3.3 of the Consortium Contract for provisions related to the Proposal in Response. Due to the standard of evaluation set forth in Section 4.3 of the Consortium Contract with respect to payment and the certification in Section 4.2 of this Proposal in Response, which will be repeated in the related Task Order, it is especially important that the Consultant be as detailed, as specific and as clear as possible with respect to the elements set forth below. After an award is made based on a particular Town+Gown RFP, these Article 2 elements of the Town+Gown RFP become the Academic Practitioner's obligations under the resulting Task Order.

2.1 Research Project Objectives.

*** IMPORTANT NOTE! ***

Describe the overall research project objectives and goals.

*** IMPORTANT NOTE! ***

Describe, in greater detail, the scope of the research project, listing and describing the research approaches, the work to be performed and the phases of the work.

*** IMPORTANT NOTE! ***

Describe the nature of the collaboration between staffs of the Requestor, as practitioner, and the Consultant, identifying the elements of practitioner experience that would be useful for the research, as well as any other research needs with which the Requestor could provide assistance.

2.2. Work Products and Deliverables.

*** IMPORTANT NOTE! ***

Describe the anticipated work products and deliverables for the Research Project, including interim reports if appropriate, in a greater level of detail than above, including the form and the nature of the content.

2.3. Project Plan and Estimated Duration of Project, including Schedule.

*** IMPORTANT NOTE! *** Describe the plan for the Research Project, assigning time values for elements of the scope as a schedule for the Project. City agencies must use expense funds in the City fiscal year they are appropriated; they are not permitted to roll unexpended expense funds into the following City fiscal year and must appropriate expense funds anew in each succeeding City fiscal year. Thus, for Research Project funded with City tax levy funds, it is important to demonstrate an alignment between the proposed schedule in the Project Plan and the Requestor's expressed expectation for the Project duration in the Town+Gown RFP. Payment requisitions pursuant to Article 4 of the Consortium Contract require, among other things, a status report to indicate the relation of the payment requisition to the Project Plan.

2.4. Project Staffing and Organization.

*** IMPORTANT NOTE! *** List the members of the Academic Team, the costs of whose work will be estimated in the chart in Section 2.5 below, and provide an organizational chart showing the Academic Team's organization for the Project.

*** IMPORTANT NOTE! *** One of the elements of Town+Gown's Organizational Character is supporting academic-practitioner collaborations by highlighting the importance of practice as a source of knowledge, with Academics and Practitioners as equal partners in knowledge creation. Thus, it is important to describe how the Academic Team members will interact with the Requestor's staff and other entities, including a narrative describing the organization and interactions as they support the nature of the academic-practitioner collaboration in Section 2.1 above which will become part of the Project Plan. In such Project Plan, it will be important to anticipate how the Academic Partner will work with the Practitioner Partner on a Research Project as the equivalent of a peer reviewer on any Task Order-generated work product as contemplated by Section 6.01A of Appendix A.

*** IMPORTANT NOTE! *** The Consultant will estimate costs associated with the Academic Team pursuant to the provisions of Section 3.3 (d) and (e) of the Consortium Contract and show them on the chart in Section 2.5 below. The Consultant shall include a curriculum vitae or resume of no more than three (3) pages for each Senior Personnel member of the Academic Team, including any Subcontractors.

*** IMPORTANT NOTE! *** As provided in Section 3.3 (e) (8) of the Consortium Contract, the Consultant may include, in the Academic Team, entities providing services as Subcontractors. To the extent a Task Order includes the services of Subcontractors, the Consultant shall be responsible for the performance of Subcontract services. For the convenience of reference only, the Consultant should know that subcontracts shall comply with the requirements of Section 2.07, 3.02, 4.07, 7.03, 7.08, 7.09 and 13.06 of Appendix A. Further, expenses incurred by the Consultant in connection with furnishing Subcontractors for the performance of required services under a Task Order are deemed included in the payments to the

Consultant as set forth in Article 4 of this Consortium Contract. While the Consultant may pay its Subcontractors first and then seek reimbursement pursuant to the applicable provisions of this Consortium Contract, in the event the Consultant does not pay its Subcontractors prior to seeking reimbursement, the Consultant shall pay its Subcontractors the full amount due them from their proportionate share of the requisition, as paid by the City. The Consultant shall make such payment not later than five Days after receipt of payment by the City.

2.5. Proposed Project Budget and Not to Exceed Amount

***IMPORTANT NOTE!** *Using this chart as a template, provide a proposed Project budget, estimating the costs of each component of the Project as provided in Section 3.3(e) of this Consortium Contract, and providing any require additional justification. Please provide a copy of an effective negotiated indirect cost rate with federal agency bound by the provisions of OMB Circular A-21 or a proposed indirect cost calculation methodology pursuant to Section 3.3(e)(xi) of the Consortium Contract.

Principal Investigator/Project Director:				
Headings under Section 3.3 (e)	[columns for calculations]			Costs

<u>Not to Exceed Amount</u>				\$ _____.

Article 3. Consultant’s Billing and Invoicing.

*** IMPORTANT NOTE! *** *The general requirements of the Consortium Contract, including Article 4, and any specific requirements of the Town+Gown RFP will govern the billing and invoicing process from the Requestor’s perspective.*

*** IMPORTANT NOTE! *** *The Consultant should list the personnel responsible for billing and invoicing functions at the Consultant organization and related contact information.*

Article 4. Representations and Warranties.

*** IMPORTANT NOTE! *** *This is boilerplate—do not make any changes to this section.*

4.1. Accuracy and Completeness of Statements. The Consultant certifies that statements, representations and warranties contained in the Proposal in Response and the Consortium Contract, including Appendix A thereto, were true and complete as of the date they were made and are true and complete as of the date of this Proposal in Response.

*** IMPORTANT NOTE! *** *For convenience of reference only, the Consultants should know that Sections 2.01 (procurement of contract/task orders), 2.03 (fair practices), 2.04 (VENDEX, now Passport), 2.07 (unlawful discriminatory practices), 3.02 (e) (subcontractor performance); 4.01 (independent contractor status), 4.02 (employees), 4.07 (E.O. 50), 6.01 (copyrights) and 7.08 (insurance certificate) contain specific representations and warranties.*

4.2. The Project. The Consultant certifies that all elements of the work and costs necessary to perform the Project in a professional and competent manner according to the standards of the relevant field(s) and/or discipline(s), and to meet the requirements set forth in the Town+Gown RFP and in Section 4.3 of the Consortium Contract have been included in this Proposal in Response.

4.3. Academic Team Members. The Consultant represents and warrants that the members of the Academic Team possess the experience, knowledge and character necessary to qualify them individually for the particular services they will perform on the Project in a professional and competent manner pursuant to Section 4.3 of the Consortium Contract.

The submission of curriculum vitae and resumes for the Senior Personnel members of the Academic Team, whether they are the Consultant’s direct employees or Subcontractors, with the Proposal in Response, implies that such individuals will be available to perform the services on the Project. For the Consultant who is awarded the Task Order, it is expected that such members of the Academic Team will perform the services under the Task Order; provided, however, that such Consultant may replace members of the Academic Team on the Project during the term of the Task Order with personnel who possess qualifications substantially similar to those being replaced, with prior notice to the Practitioner Partner.

To the extent the Requestor believes a member of the Academic Team is unable to perform services in a professional and competent manner according to the standards of the relevant field(s) and/or discipline(s), it shall have the right to raise such concerns with the Consultant so that both parties have the opportunity to resolve such concerns in good faith, subject to the provisions of Section 10.02 of Appendix A.

4.4. Agreement to Comply with Terms of Task Order. The Consultant agrees to comply with the terms and conditions of the Task Order and the Consortium Contract under which it was issued.

4.5. Conflicts of Interest—Gown. The Consultant certifies that it has implemented and is enforcing a written policy on conflicts of interest, consistent with the provisions of the National Science Foundation’s AAG Chapter IV.A.; further, that, to the best of the undersigned Authorized Party’s knowledge, all financial disclosures required by the conflict of interest policy were made; and that conflicts of interest, if any, were, or prior to the institution's expenditure of any funds under the award, will be, satisfactorily managed, reduced or eliminated in accordance with the Consultant’s conflict of interest policy.

4.6. Training and Oversight. To the extent the Academic Team includes any postdoctoral researchers, graduate students or undergraduate students, the Consultant certifies that it has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers.

4.7. Affirmation. The Consultant affirms and declares that it is [*** IMPORTANT NOTE!** * *Insert description of status under State corporation law and federal income tax law*], and, further, that it is not in arrears to the City upon debt, contract or taxes, it is not a defaulter, as surety or otherwise, upon obligation to the City, it has not been declared “not responsible” or disqualified, by any agency of the City, and that, to its knowledge, there is no proceeding pending relating to its responsibility or qualification to receive public contract except as indicated in the space below:

Article 5. Task Order Execution. Execution of a resulting Task Order by the Requestor shall be evidence of its approval of the following items, as explicitly noted above in this Proposal in Response:

*** IMPORTANT NOTE! *** This is boilerplate—do not make any changes to this section.

- (1) subcontractors pursuant to Sections 3.3 (b) and (e)(8) of the Consortium Contract, subject to final compliance with PPB Rule requirements and Sections 2.07, 3.02 and 4.07 of Appendix A,
- (2) compensation beyond three months and/or utilizing a percentage equivalent of academic contract effort pursuant to Section 3.3(e)(1) of the Consortium Contract,
- (3) treating components of an Academic Partner’s facilities and administration as a direct cost pursuant to Section 3.3 (e)(2) of the Consortium Contract,
- (4) the purchase of equipment and post-Project ownership of such equipment pursuant to Section 3.3 (e)(6) of the Consortium Contract,
- (5) the incurrence of expenses related to long-distance travel pursuant to Section 3.3 (e)(7) of the Consortium Contract, to be reimbursed, in the case of City Agency Requestors, pursuant to the provisions of Article 4 of the Consortium Contract,
- (6) the incurrence of expenses related to computer services pursuant to Section 3.3 (e)(9) of the Consortium Contract, and
- (7) the application of the formula to determine indirect costs pursuant to Section 3.3(e)(10) of the Consortium Contract.

Article 6. Relation of Task Order to Consortium Contract.

*** IMPORTANT NOTE! *** This is boilerplate—do not make any changes to this section.

6.1 Task Order Incorporates Terms of Consortium Contract. If the Requestor accepts this Proposal in Response, the resulting Task Order shall be deemed to incorporate all the terms and conditions of the Consortium Contract, including Appendix A thereto, even if such terms and conditions are not expressly

reiterated in the Task Order.

6.2 Task Order Not an Amendment of Consortium Contract. Neither a Proposal in Response nor a Task Order may alter the terms and conditions of the Consortium Contract. The terms and conditions of the Consortium Contract Agreement can only be modified by the parties in an amendment pursuant to Section 6.4 of the Consortium Contract, and any provision of a Task Order that would have the effect of amending a term or condition of the Consortium Contract shall be null and void.

Any amendments, changes or modifications of this Task Order must comply with the provisions of Section 9.01 of Appendix A.

6.3 Conflict between Task Order and Consortium Contract. In the event of any conflict between any provision in a resulting Task Order and any provision of the Consortium Contract, including Appendix A thereto, the provision in the Consortium Contract shall control.

SUBMITTED BY:

By: _____

Name: _____

Title: _____

Date: _____